Amendments to the Specification:

Please replace the paragraph on page 4, lines 1 to 13, with the following rewritten paragraph:

A technique of a simulation method, which differs from the software simulation using the conventional HDL, and which is suitable for the development of a system including a plurality of ~~module~~ modules, is disclosed in the reference "OO-VHDL Object-Oriented Extensions to VHDL" (IEEE Computer, Oct., 1995, pp. 18–26). The simulation method described in the reference uses a new language in which the features of an object oriented language are incorporated into the conventional HDL, and describes the modules and the connections between the modules. ~~It is described in the~~ The reference describes that the features of the object oriented language, such as "class" and "inheritance", make the statements and recycling of the modules easy. The reference, however, does not disclose a specific means for applying the simulation method, or the method for describing the modules to a large scale system in which a plurality of various types of circuit modules are connected.

Please replace the paragraph on page 5, lines 8 to 15, with the following rewritten paragraph:

~~In a~~ A first aspect of the present invention~~,~~ is directed to the simulation method for simulating a system having a plurality of circuit modules using software~~,~~. The simulation method uses ~~comprises the steps of: using~~ an object oriented language~~, preparing~~ that prepares a plurality of circuit base classes, which describe base circuit modules as classes, as a library, ~~describing~~ describes the circuit modules to be simulated as classes by inheriting the circuit base classes prepared as the library~~,~~ and ~~describing~~ describes the system to be simulated by combining the circuit modules described as the classes.

Please replace the paragraph on page 5, lines 16 to 18, with the following rewritten paragraph:

~~In a~~ A second aspect of the present invention~~;~~ adds to the simulation method ~~further comprises the step of~~ by describing the system as a class by inheriting the circuit base classes prepared in the library.

Please replace the paragraph on page 5, line 19, and continuing to page 6, line1, with the following rewritten paragraph:

~~In a~~ A third aspect of the present invention~~;~~ adds to the simulation method ~~further comprises the step of~~ by preparing a component class having the properties of a circuit which contains a circuit operating asynchronously with a clock signal, and a synchronous module class, having the properties of a circuit operating synchronously with the clock signal in the library, which is derived from the component class.

Please replace the paragraph on page 6, lines 2 to 6, with the following rewritten paragraph:

~~In a~~ A fourth aspect of the present invention~~;~~ adds to the simulation method ~~further comprises the step of~~ by preparing a bus class having the properties of a bus, a bus master class having the properties of a bus master, a bus slave class having the properties of a bus slave, as a circuit base class described as a class derived from the synchronous module class, in the library.

Please replace the paragraph on page 6, lines 7 to 11, with the following rewritten paragraph:

~~In a~~ A fifth aspect of the present invention~~;~~ adds to the simulation method

4

further comprises the step of by preparing a bus master interface class, whose base classes are the synchronous module class, and which has the properties of a bus master interface, and a bus slave interface class having the properties of a bus slave interface, as the circuit base classes in the library.

Please replace the paragraph on page 6, lines 12 to 15, with the following rewritten paragraph:

In a A sixth aspect of the present invention, adds to the simulation method further comprises the step of by preparing a central processing unit class, whose base class is the synchronous module class, and which has the properties of a central processing unit, as the circuit base class in the library.

Please replace the paragraph on page 6, lines 16 to 19, with the following rewritten paragraph:

In a A seventh aspect of the present invention, adds to the simulation method further comprises the step of by preparing a hierarchy class, whose base class is the synchronous module class, and which has the properties of a hierarchy of a circuit containing the bus, as the circuit base class in the library.

Please replace the paragraph on page 6, lines 20 to 23, with the following rewritten paragraph:

In an An eighth aspect of the present invention, adds to the simulation method further comprises the step of by preparing a memory class, whose base class is the bus slave class, and which has the properties of a memory, as the circuit base class in the library.

Please replace the paragraph on page 7, lines 1 and 2, with the following

rewritten paragraph:

In a ~~In a~~ A ninth aspect of the present invention, ~~is~~ is the simulation apparatus, using a computer, ~~for executing~~ which executes the above described method.

Please replace the paragraph on page 7, lines 3 and 4, with the following rewritten paragraph:

~~In a~~ A tenth aspect of the present invention, ~~is~~ is the computer-readable storage medium which stores a computer program for executing the method.